

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions of the claims.

LISTING OF CLAIMS:

1. (amended) An immunogenic composition capable of inducing a cytotoxic response *in vitro* or *in vivo* against a viral disease through an MHC-1 restricted exogenous antigen presentation pathway without requiring viral replication, comprising at least one of the compounds:

(A) a first plasmid comprising a polynucleotide corresponding to the entire or a part of the a viral genome and a second plasmid comprising an insert of a polynucleotide coding for a viral envelope, a part of the envelope, or a surface protein, wherein both plasmids are under the control of a promoter, and the plasmids are selected for their fusogenic properties when binding to antigen presentation cells and for inducing a cytotoxic response through an MHC-1 restricted exogenous antigen presentation pathway; and

(B) ~~a plasmid comprising a polynucleotide coding for the entire or a part of the virus genome and an insert comprising a polynucleotide coding for a viral envelope, a part of the envelope, or a surface protein, wherein the plasmid is under the control of a promoter, and the plasmid expresses viral particles being selected for their fusogenic non-replicative properties, and for inducing a cytotoxic response after a CMH-2 restricted exogenous antigen presentation pathway;~~

(C) ~~a virus with intact fusogenic capacities, wherein the infectious capacities of the virus have been inactivated or attenuated; and,~~

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

(D) viral particles obtained by the purification of a cell culture supernatant prepared by transfecting producing cells with the plasmids in (A) and purifying the supernatant.

2. (previously presented) An immunogenic composition as claimed in claim 1 wherein the viral particles obtained by the purification of a cell culture supernatant are prepared by transfecting producing cells with the plasmids in (A) or (B) and purifying the supernatant, or by infecting antigen presenting cells with an HIV virus, purifying the supernatant, and inactivating or attenuating the infectious capacity of the virus.

3. (amended) A vaccinating composition comprising the immunogenic composition as claimed in claim 2 1 and a pharmaceutically acceptable vehicle.

4. (amended) A vaccinating composition comprising the immunogenic composition as claimed in claim 2 1 and another vaccine.

8. (previously presented) A method of treatment according to claim 21, wherein the virus is a human or animal retrovirus.

9. (previously presented) A method of treatment according to claim 21, wherein the virus is HIV-1, HIV-2, SIV, FeLV, or FIV.

10. (previously presented) A method of treatment according to claim 21, wherein the host is a mammal.

11. (previously presented) A method of treatment according to claim 21, wherein the host is a mouse.

12. (amended) A process of stimulation *in vivo* of cytotoxic lymphocytes through an MHC-1 restricted exogenous antigen presentation pathway without requiring viral replication, comprising:

(A) administering an immunogenic composition as claimed in claim 1 to a mammal;

(B) optionally testing cytotoxic T cells obtained from the mammal after step (A) in a cytotoxic test comprising:

(i) incubating an organ or a biologic fluid of the host, wherein the organ or biologic fluid contains cytotoxic T cells from the host with a synthetic peptide, wherein the sequence of the synthetic peptide is encoded by a viral genome contained partly in the first or the second plasmid; or

(ii) incubating the target cells with the same HLA haplotype as the host or a compatible HLA haplotype, said target cell being incubated with a synthetic peptide, wherein the synthetic peptide has a sequence that is a part of the sequence of an ~~HIV genome~~ HIV genome.

15. (previously presented) A process of treatment of an eukaryotic host suffering from a viral pathology, comprising treating and incubating antigen presenting cells with the immunogenic composition as claimed in claim 1 and administering the antigen presenting cells back to the mammal after incubation.

16. (previously presented) A process of screening a composition that is capable of a cytotoxic response in response to a viral pathology *in vitro* or *in vivo* by exogenous antigen presentation without viral replication, comprising

(A) administering an immunogenic composition as claimed in claim 1 to a mammal;

(B) testing cytotoxic T cells obtained from the mammal after step (A) in a cytotoxic test comprising

(i) incubating an organ or a biologic fluid of the host, wherein the organ or biologic fluid contains cytotoxic T cells from the host with a synthetic peptide, wherein the sequence of the synthetic peptide is encoded by a viral genome contained partly in the first or the second plasmid; or

(ii) incubating the target cells with the same HLA haplotype as the host or a compatible HLA haplotype, said target cell being incubated with a synthetic peptide, wherein the synthetic peptide has a sequence that is a part of the sequence of an HIV- genome.

17. (amended) A method of determining a cytotoxic T lymphocyte (CTL) reponse to an antigen, wherein the method comprises:

(A) providing viral particles according to claim 1 ~~containing the antigen and having a fusogenic envelope membrane;~~

(B) targeting the viral particles into professional antigen presenting cells (APCs) by binding the viral particles to the plasma membranes of the APCs

(C) allowing the viral particles to be taken up by the APCs after fusion of the fusogenic envelope membranes of the viral particles with the plasma membranes of the APCs,

(D) presenting the antigen by MHC-I-restricted presentation by the APCs without viral replication or de novo, *in situ* synthesis of the antigen in the APCs;

(E) contacting the resulting transduced APCs with CTLs that recognize MHC-I-restricted antigen; and

(F) determining cell cytotoxicity resulting from said contact.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER ^{LLP}

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

19. (amended) The immunogenic composition as claimed in claim 2 1, wherein the producing cells are HeLa cells or 293 cells.
20. (previously presented) A vaccinating composition containing an immunogenic composition wherein the composition is obtained by the process of claim 16.
21. (previously presented) A method of treating a eukaryotic host suffering from a viral pathology comprising administering two polynucleotides, wherein the first polynucleotide codes for the entire virus genome or a part of the virus genome and the second polynucleotide is an insert that expresses a polynucleotide coding for a viral envelope, a part of the envelope, or a surface protein of the viral envelope, wherein both polynucleotides are expressed under the control of a promoter and express viral particles that are selected for fusogenic, non-replicative properties, and for the ability to induce a cytotoxic response through a CMH-1 restricted exogenous antigen presentation pathway.
22. (previously presented) The method of claim 21, wherein the two polynucleotides are on separate plasmids.
23. (previously presented) The method of claim 21, wherein the two polynucleotides are on the same plasmid.

REMARKS

Applicants request entry and consideration of the above amendments.

Claims 1, 3, 4, 12, 17, and 19 have been amended. No new matter enters through this amendment.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER ^{LLP}

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Application No.: 10/083,678
Attorney Docket No.: 03495-0217

Pleas grant any extensions of time required to enter this response and charge
any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: January 29, 2004

By: 

Salvatore J. Arrigo
Reg. No. 46,063
Phone: (202) 408-4160
Fax: (202) 408-4400
E-mail: arrigos@finnegan.com

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER ^{LLP}

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com